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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|----------------------------------|-------------|----------------------|------------------------|------------------|--|
| 10/020,449 | 12/11/2001 | Rasvan Catalin Mihai | 45896.0011 | 45896.0011 1707 | |
| 75 | 590 09/10 | 2003 | | | |
| HOLLAND & | | EXAM | EXAMINER | | |
| 555 - 17th Stre P.O. Box 8749 | , | HAN, YOUNG | HAN, YOUNGHUIE JESSICA | | |
| Denver, CO 86 | 0201 | | ART UNIT | PAPER NUMBER | |

2838 DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



| • | | Application No. | Applicant(s) | | | | |
|---|---|---|---|-----------------------|--|--|--|
| Office Action Summary | | 10/020,449 | MIHAI ET AL. | | | | |
| | | Examiner | Art Unit | | | | |
| | | Y. J. Han | 2838 | \mathcal{H} | | | |
| Period fo | The MAILING DATE of this communication app or Reply | ears on the cover sheet with the | correspondence address | ** | | | |
| THE N - Exter after - If the - If NO - Failur - Any re | ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Issions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing indicated part of the provided period for reply will, by statute, eply received by the Office later than three months after the mailing indicated part of the provided period for reply will, by statute, eply received by the Office later than three months after the mailing in patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be to within the statutory minimum of thirty (30) da will apply and will expire SIX (6) MONTHS fror cause the application to become ABANDON | imely filed ys will be considered timely. the mailing date of this communi ED (35 U.S.C. § 133). | cation. | | | |
| 1) | Responsive to communication(s) filed on | _ | | | | | |
| 2a) <u></u> □ | This action is FINAL . 2b)⊠ Th | is action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | | | |
| <u>-</u> | Claim(s) <u>1-24</u> is/are pending in the application | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| | Claim(s) is/are allowed. | | | | | | |
| | i)⊠ Claim(s) <u>1-24</u> is/are rejected. | | | | | | |
| • | Claim(s) is/are objected to. | | | | | | |
| 8)[| Claim(s) are subject to restriction and/o | r election requirement. | | | | | |
| 9) 🗌 - | The specification is objected to by the Examine | r. · | | $\boldsymbol{\varpi}$ | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner. | | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | | |
| 12) ☐ The oath or declaration is objected to by the Examiner. | | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | | |
| | Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) of (i). | | | | | | |
| a) All b) Some * c) None of: | | | | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | | |
| | a) All b) Some c) None or: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | | |
| |) | | | | | | |
| Attachmen | t(s) | | | | | | |
| 2) Notic | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>7</u> | 5) Notice of Informa | ry (PTO-413) Paper No(s) I Patent Application (PTO-152 | | | | |
| I.S. Patent and T | rademark Office | | ., | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 3. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferraro (4,438,486 cited in IDS filed 6/10/02)) in view of Bendikas et al (6,368,064).

Ferraro discloses a capacitor (5) and diode (7) in series, together connected in parallel with a switch (3), a power converter (11a, 11b, 13, 23), such as DC/AC /DC converter, connected in parallel with the capacitor (5), but fails to discloses different types of cooling elements, such as fan, liquid pump, and peltier device, powered by a power converter for cooling the switching power supply. Bendikas et al, however, teaches that the use of a cooling element (12) powered by a power converter (24) for cooling the switching power supply is well known in the art. Thus, it would have been obvious to one having ordinary skill in the art to

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employ a desired cooling element to obtain the claimed invention, as taught by Bendikas, for the purpose of protecting the power supply by removing the heat.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y. J. Han whose telephone number is 703-308-0109. The examiner can normally be reached on Mon-Fri 5:30am-2:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 703-308-1680. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

S S Han

Primary Examiner Art Unit 2838

